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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/776,255	02/12/2004	Jacques Auclair	033818-096	4171
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EXAMINER

KNABLE, GEOFFREY L

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/776,255

**Applicant(s)**

AUCLAIR, JACQUES

**Examiner**

Geoffrey L. Knable

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
4a) Of the above claim(s) 6,8,11,13,15 and 17-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,9,10,12,14 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-12-04</u> . | 6) <input type="checkbox"/> Other: ____  |

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-17, drawn to a method for laying a tire belt ply, classified in class 156, subclass 123.
  - II. Claims 18-23, drawn to a transporter, classified in class 156, subclass 405.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice other materially different processes such as conveying plastic sheets or other non tire belt ply articles.
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
4. This application contains claims directed to the following patentably distinct species:
  - A: the embodiment effected using front and rear transporters (e.g. claims 5+);
  - B: the embodiment effected using a single transporter (e.g. claims 6+).

The species are independent or distinct because they are directed to mutually exclusive embodiments of the invention.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, at least claims 1-3 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

5. During a telephone conversation with Alan Kopecki on February 28, 2006 a provisional election was made with traverse to prosecute the invention of group I, species A, claims 1-5, 7, 9, 10, 12, 14 and 16. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6, 8, 11, 13, 15 and 17-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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6. Claims 1-5, 7, 9, 10, 12, 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 1 of claim 1, the method is described as laying a tire belt ply on a generally cylindrical form but there is no other express or positive mention of such a step in the method, this raising some potential for confusion in assessing the scope of the claim. This claim has been read as directed to a method that requires laying of the belt on a generally cylindrical form but it would avoid any potential for confusion in this regard if this were more positively brought out in the body of the method as well (or alternatively, recast the claim in Jepson form - "In a method..., the improvement comprising...").

In claim 1, line 6 (and similarly at claim 1, line 11 as well as claim 4, line 5), it is not entirely clear what is meant by "moving independently at least one gripping sector of each of the front and rear areas" - in particular, it is not clear what movement is "independent" of what (i.e. it seems the present language could read on the front area being moved independently of the rear sector or alternatively, the at least one sector being independent from other sectors). Clarification is required of the scope of protection afforded by this language.

In claim 4, line 2, it is not clear what the "corresponding number" refers to - i.e. it is considered that this could be read as relative to the number of sectors (as apparently intended) or the number "2," i.e. corresponding to the front and rear areas.

In claims 7 and 10, no antecedent has been established for "the advancements of the conveyor and transporters", it being noted that claim 5 only refers to advancing the belt ply.

Claim 16 is entirely indefinite and confusing, it not being clear exactly what step or steps are being described in this claim.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Regterschot et al. (US 5,720,837) or Kitajima et al. (US 5,904,788).

Regterschot et al. discloses a method for laying a tire belt on a cylindrical form (1), the belt ply including front and rear edges and areas which can be said to include or define three "gripping sectors". Further, these edges are corrected to a desired alignment by correcting thereof (e.g. col. 10, line 6-11). To determine the geometries of the front and rear edges, these edges are passed across a fixed detection line (detected by 28/31 - e.g. col. 9, lines 10+). Further, the shape of the belt material is then adjusted based upon the measured shape compared to the desired reference shape (or the

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shape of the other end) - e.g. col. 9, lines 30+. Also, since the correction of the shape of the edges occurs during transition across the transition region, the various sectors of the front and rear edges are considered to be moved "independently" as claimed - i.e. note that the front toe or tip will be corrected or moved before other parts thereof are moved. Gripping (using 25/26) is also involved in the process although it is noted that claim 1 does not require any actual gripping of the belt - "gripping" as claimed is only used in the context of defining plural (imaginary) sectors of the belt edges. A method as required by claim 1 is therefore considered to be anticipated by this disclosure. As to claims 2-3, note that correction to a reference shape as well as to the shape of the other edges are both contemplated (col. 10, lines 6-11).

Kitajima et al. similarly discloses a method for laying a tire belt ply on a cylindrical drum (42), the belt ply including front and rear edges and areas which can be said to include or define three "gripping sectors". Further, these edges are corrected to a desired alignment by correcting thereof (e.g. fig. 7). To determine the geometries of the front and rear edges, these edges are passed across a fixed detection line "S". Further, the shape of the belt material is then adjusted based upon the measured shape compared to the desired calculated shape (e.g. col. 9, lines 31-34). Also, note that only the tip is corrected in fig. 7, this being considered to be movement of this sector "independently" of the others as claimed. Gripping (e.g. using magnets 36) is also involved in the process although it is noted that claim 1 does not require any actual gripping of the belt - "gripping" as claimed is only used in the context of defining plural (imaginary) sectors of the belt edges. A method as required by claim 1 is therefore

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considered to be anticipated by this disclosure. As to claims 2-3, note that correction to actual or reference shapes are described (e.g. col. 11, lines 38-49).

10. Claims 1, 3-5, 7, 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 2003/0019725) taken in view of Regterschot et al. (US 5,720,837) or Kitajima et al. (US 5,904,788).

Hoffman discloses a method for correcting the shape of the edges of a textile or steel "corded" strip (e.g. paragraph [0022]) by passing the strip across a sensing line (created by sensors 9/10/11) and independently moving sectors of the strip (gripped by 12/13/14) by what can be considered correction values created by the sensors. It is noted also that reference/sensor lines at an angle to the conveyor are also contemplated (e.g. paragraph [0008]). Although this reference does not expressly describe application to a cylindrical drum, it is considered that the ordinary artisan would have understood that corded strips are commonly used in building tires and found it obvious to therefore supply strips corrected as in the reference to a drum - note also Regterschot et al. and Kitajima et al. which show application of corded strips in tire building as well as the importance of correcting the alignment of the edges thereof, such providing additional evidence that the artisan would have found it obvious to apply the Hoffman teachings to tire building. As to claim 3, Hoffman would have suggested that the edges be corrected to a reference straight line. As to claim 4, note gripping assemblies 12/13/14/12'/13'/14'. As to claim 5, in applying the teachings of Hoffman in the context of the edge correction necessary in a tire building line as for example in Regterschot et al. and Kitajima et al., it is considered that each of the claimed steps



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(unwinding, cutting, advancing, aligning, winding, etc.) would have been seen to be necessary and obvious, it being stressed that although these would not be practiced necessarily in the same way or order as desired by applicant, nothing in the claims requires any particular order of steps or other specifics of the processing in a manner that would define over this. As to claims 7 and 10, such adjustment of length and/or synchronization are well known and obvious to control strip length in this art - e.g. note col. 13, lines 21-27 of Regterschot et al. As to claim 16, as already noted, it is not clear what this claim requires - use of magnets is however well known - e.g. Hoffman paragraph [0022], magnet "40" in Kitajima et al. and magnet "18" in Regterschot et al.

11. Claims 1-5, 7, 9, 10 and 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 05-084849 to Yokohama Rubber.

JP '849 to Yokohama Rubber discloses a process of laying a tire belt on a cylindrical form (1), the belt ply including front and rear edges and areas which can be said to include or define three "gripping sectors". Further, these edges are corrected to a desired alignment by correcting the shape thereof using at least in part front and rear correcting devices "4" and "6" which operate apparently on the tip of the ply based upon a detected shape thereof (detected using apparently a fixed line for detection at "7"). Since the correcting devices 4/6 apparently only operate on the tip area (e.g. fig. 7), it would seem that this area is being moved independently of the other sectors of the belt ply as claimed. Gripping with devices 4/6 is apparently also involved in the process although it is noted that claim 1 does not require any actual gripping of the belt -

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"gripping" as claimed is only used in the context of defining plural (imaginary) sectors of the belt edges. A method as required by claim 1 is therefore considered to be anticipated by this disclosure, any differences (if present or if the reference is inaccurately understood by the examiner) being considered obvious optimizations of the basic teachings of this reference in view of the similarity in structure, function and overall goals of this reference to the presently claimed method. As to claims 2-3, note that correction to a reference shape as well as to the shape of the other edges (to yield the fig. 10 end result) both seem contemplated. As to claim 4, the devices 4/6 are front and rear movable transporters. Although this reference seems to only provide a single gripper on each movable transporter, as already noted, it is not clear that claim 4 clearly requires more than this, it being noted that the devices 4/6 function as edge correctors that independently move a single sector of the ply. As to claim 5, winding, cutting, gripping, determining, advancing, aligning, winding, etc. all seem present in the reference disclosure. As to claim 7 and 10, synchronized movement to adjust length seems suggested - e.g. note paragraph [0011] of the translation. As to claim 9, note reverse movement suggested esp. at paragraph [0017], this being considered to suggest or in any event render this claim requirement obvious. The requirements of claim 16 are not understood as already noted - the reference is considered to suggest or render obvious what is defined in this claim, esp. in view of the reference to steel cords in the reference.

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12. Claims 12 and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

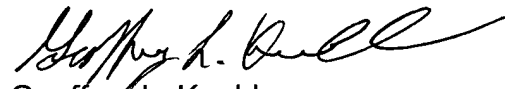
The closest prior art (applied above) does not reasonably teach or render obvious the additional features of these claims. As to claim 12 in particular, Regterschot et al. does suggest applying a curve correction but would not otherwise suggest laying as in claim 12/5/4/1. As to claim 14, although the applied references show independent movement of ply sections (e.g. Hoffman) as well as correcting movement of only toe or tip ends (e.g. JP 05-084849 to Yokohama Rubber), the closest prior art does not show the additional features defined by this claim including especially where "only the gripping assembly gripping the toe is equipped with an edge corrector for adjusting the edge of the ply by moving the toe of the ply independently while keeping fixed the gripping assemblies gripping the central gripping sector and the heel."

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
March 4, 2006